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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,923	07/28/2003	Jinsho Matsuyama	00839.000466.	3607
5514	7590	01/06/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			NGUYEN, VINH P	
30 ROCKEFELLER PLAZA			ART UNIT	
NEW YORK, NY 10112			PAPER NUMBER	
			2829	

DATE MAILED: 01/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/627,923	Applicant(s) MATSUYAMA, JINSO	
	Examiner VINH P NGUYEN	Art Unit 2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 1-25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) ✓
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>0903</u> . ✓ | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
6) <input type="checkbox"/> Other: _____ |
|--|--|

Art Unit: 2829

1. Claims 1-25 are objected to because of the following informalities:

In claim 1, it appears that method steps are not properly recited. Furthermore, the relationship between the irradiance detection circuit and the reference device is unclear. Is the reference device a part of the irradiance detection circuit?

In claim 5, it is unclear how the integrated circuit is interrelated and associated with the reference device.

In claim 12, it is unclear what “a light irradiation means” represents. Furthermore, it is unclear what is the relationship between the irradiance detection circuit and the reference device. Is the reference device a part of the irradiance detection circuit? Furthermore, it is also unclear what is the relationship between the light responsive time constant and the current –voltage measurement of the photoelectric conversion device.

In claim 14, it is unclear what “a means for installing said photoelectric conversion device and said reference device outdoors” represent. Is it shown in any of drawings?

Claim 21, it is unclear what are the relationship between the irradiance detection circuit and the reference device. Is the reference device a part of the irradiance detection circuit?

In claim 25, it is unclear what “means for irradiating light” represents. Furthermore, it is also unclear what is the relationship between the light responsive time constant and the current – voltage measurement of the photoelectric conversion device.

Other dependent claims are also objected to because they depend on objected claims

Appropriate correction is required.

2. Claims 1,5,12,14,21 and 25 would be allowable if rewritten or amended to overcome the objection set forth in this Office action.

It is noted that the prior art does not disclose method and apparatus for measuring current voltage characteristics of a photoelectric conversion device having a combination of light irradiation means for irradiating a photoelectric conversion device, a reference device electrically coupled to a an irradiance detection circuit and means for adjusting a light responsive time constant of the irradiance detection circuit as recited in claims 1,12,21,25 in combination with other limitations recited in other dependent claims.

3. This application is in condition for allowance except for the following formal matters as mentioned in paragraph # 1.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Low et al (Pat # 3,630,627) disclose solar cell assembly test method.

Art Unit: 2829

Yoshino et al (Pat # 6,169,414) disclose measuring apparatus and method for measuring characteristic of solar cell.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH P NGUYEN whose telephone number is (571)-272-1964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


VINH P. NGUYEN
PRIMARY EXAMINER
ART UNIT 2829
01/03/05